REMARKS

[0003] Applicant respectfully requests reconsideration and allowance of all of the claims of the application. Claims 2-7, 9-30, 32-39, 41-46, and 48 are presently pending. Claims 2, 20, 32, 41 and 48 are amended herein. No claims are withdrawn or cancelled herein. No new claims are added herein.

Formal Request for an Interview

[0004] If the Examiner's reply to this communication is anything other than allowance of all pending claims, then I formally request an interview with the Examiner. I encourage the Examiner to call me—the undersigned representative for the Applicant—so that we can talk about this matter so as to resolve any outstanding issues quickly and efficiently over the phone.

[0005] Please contact me to schedule a date and time for a telephone interview that is most convenient for both of us. While email works great for me, I welcome your call as well. My contact information may be found on the last page of this response.

Claim Amendments

[0006] Without conceding the propriety of the rejections herein and in the interest of expediting prosecution, Applicant amends claims 2, 20, 32, 41 and 48 herein. Applicant amends claims to clarify claimed features. Such amendments are made to expedite prosecution and more quickly identify allowable subject matter. Such amendments are merely intended to clarify the claimed features, and should not be construed as further limiting the claimed invention in response

to the cited references. Support for the amendments is found, at least, on pages 5-23, and figures 2 and 9 of the specification.

Substantive Matters

Claim Rejections under § 103

[0007] The Examiner rejects claims 2-7, 9-30, 32-39, 41-46, and 48 under § 103. For the reasons set forth below, the Examiner has not made a prima facie case showing that the rejected claims are obvious.

[0008] Accordingly, Applicant respectfully requests that the § 103 rejections be withdrawn and the case be passed along to issuance.

[0009] The Examiner's rejections are based upon the following references in combination:

- **Dowling:** *Dowling, et al.,* US Patent No. 6,522,875 (published Feb. 18, 2003); and
- **Goldman:** *Goldman,* US Patent No. 6,343,291 (published Jan. 29, 2002).

Overview of the Application

[0010] The Application describes a technology for a handheld portable computing device to determine its location and to interact with a location environment.

Cited References

[0011] The Examiner cites Dowling as the primary reference in the obviousness-based rejections. The Examiner cites Goldman as a secondary reference in the obviousness-based rejections.

Dowling

[0012] Dowling describes a geographical web browser which allows a user to navigate a network application such as the World Wide Web by physically navigating in geographical coordinates.

Goldman

[0013] Goldman describes a method for accessing an information repository, including computer readable program code stored on computer readable media, where the computer readable program code includes code for organizing information stored in the information repository into a location tree of a hierarchy of information. The code creates a hierarchy of a number of derived containers that have contents and are generated in conformance with an information model which has a hierarchy of type-defined container definition nodes.

Obviousness Rejections

Lack of *Prima Facie* Case of Obviousness (MPEP § 2142)

[0014] Applicant disagrees with the Examiner's obviousness rejections. Arguments presented herein point to various aspects of the record to demonstrate that all of the criteria set forth for making a prima facie case have not been met.

Based upon Dowling and Goldman

[0015] The Examiner rejects claims 2-7, 9-30, 32-39, 41-46, and 48 under 35 U.S.C. § 103(a) as being unpatentable over Dowling in view of Goldman. Applicant respectfully traverses the rejection of these claims and asks the Examiner to withdraw the rejection of these claims.

Independent Claims

Independent Claim 2

[0016] Claim 2 is amended to clarify claimed features. Applicant submits that the combination of Dowling and Goldman does not render obvious at least the following features as recited in this claim (with emphasis added):

"determining a location of the portable computing device, wherein **the determining comprises**:

receiving location information from a location provider, the location information pertaining to a current location of the portable computing device;

accessing one or more hierarchical tree structures each of which comprising multiple **nodes that represent physical or logical locations**, **each node having a unique identifier**; and

traversing at least one node on the one or more hierarchical tree structures **responsive to the receiving of the location information** to ascertain a device location;

acquiring digital data associated with the determined location and that can permit the portable computing device to interact with an application associated with a location environment; and

interacting with the **application that queries** the portable computing device about the current location **by supplying** the application **with information that pertains to the determined location**"

[0017] In contrast, in Dowling:

- location is determined without accessing a hierarchical tree structure;
- location is determined without traversing a hierarchical tree structure **responsive to receiving the location information** (in Dowling, location is determined directly from GPS information without **further** accessing or traversing a hierarchical tree structure) ;

- no application **queries** the mobile device (In Dowling, web pages are downloaded directly. Also, in Dowling (col. 15, ll. 31-40), the mobile device **sends** request, **not receives** queries, to ask for web pages to be downloaded.) ;

- the mobile device does not **supply** the application **with information that pertains to the determined location**.

The Examiner admits that Dowling fails to disclose a hierarchical tree structure and asserts that Goldman cures this deficiency. The Applicant respectfully disagrees. Claim 2 recites "accessing one or more hierarchical tree structures" and "traversing at least one node on the one or more hierarchical tree structures" to **determine a location** of the portable computing device. However, in Goldman, the tree structure is used for **organizing and viewing** information stored in the information repository, not for determining a location of the portable computing device. Also, claim 2 recites "multiple nodes that represent physical or logical locations." However, in Goldman, not all nodes are related to locations. For example, in Fig. 37 of Goldman, "ROUTERS" and "SWITCHES" are not location nodes. Furthermore, with amendments in claim 2, Goldman fails to disclose or teach "each node having a unique identifier." Instead, in Goldman, no unique identifier is associated with each node and two different nodes may have the same entry, as shown in Fig. 37 of Goldman, where "DEVICES," "ROUTERS," and "SWITCHES" are in many nodes.

Independent Claim 20

[0018] Applicant submits that the combination of Dowling and Goldman does not render obvious at least the following features as recited in this claim (with emphasis added):

"**determining** a location of the portable computing device, wherein the determining **comprises**:

receiving location information from a location provider, the location information pertaining to a current location of the portable computing device;

accessing multiple hierarchical tree structures comprising multiple nodes that represent physical or logical locations, each node having a unique identifier; and

traversing at least one node on the one or more hierarchical tree structures responsive to the receiving of the location information to ascertain a device location;

wherein the multiple hierarchical tree structures further comprising:

a **first** hierarchical tree structure having multiple nodes associated with first locations, the first hierarchical tree structure having a **uniform standardized** representation;

a **second** hierarchical tree structure having multiple nodes associated with second locations,

wherein the second hierarchical tree structure has a **proprietary** representation,

each node has a URL (Uniform Resource Locator), and

at least one node from the second hierarchical tree structure is **linked** with one node on the first hierarchical tree structure by a link that is configured to enable a complete location to be derived from the first and second locations;

acquiring one or more **applets** associated with the determined location; and

locally executing the one or more applets sufficient to interact with a location environment."

[0019] In contrast, in Dowling:

- the mobile device does not acquire any applet (The Examiner alleges that the "application data" in Dowling is an applet. The Applicant respectfully disagrees because an applet is a program that runs in the context of another program. The "application data" in Dowling is a data, such as a web page, not a program (col. 15, ll. 31-40));
- the mobile device does not locally execute any applet (In Dowling, the "application data" is directly downloaded without be executed);
- location is determined without accessing a hierarchical tree structure;
- location is determined without traversing a hierarchical tree structure responsive to receiving the location information (in Dowling, location is

determined directly from GPS information without further accessing or traversing a hierarchical tree structure) ;

[0020] The Examiner admits that Dowling fails to disclose a hierarchical tree structure and asserts that Goldman cures this deficiency. The Applicant respectfully disagrees. Claim 20 recites "accessing one or more hierarchical tree structures" and "traversing at least one node on the one or more hierarchical tree structures" to **determine a location** of the portable computing device. However, in Goldman, the tree structure is used for **organizing and viewing** information stored in the information repository. Also, claim 20 recites "multiple nodes that represent physical or logical locations." However, in Goldman, not all nodes are related to locations. For example, in Fig. 37 of Goldman, "ROUTERS" and "SWITCHES" are not location nodes. Furthermore, with amendments in claim 20, Goldman fails to disclose or teach "each node having a unique identifier." Instead, in Goldman, no unique identifier is associated with each node and two different nodes may have the same entry, as shown in Fig. 37 of Goldman, where "DEVICES," "ROUTERS," and "SWITCHES" are in many nodes.

[0021] Furthermore, in Goldman:

- no **multiple** hierarchical tree structures **with a link** is disclosed;
- no **first** hierarchical tree structure having a **uniform standardized** representation and no **second** hierarchical tree structure having a **proprietary** representation are disclosed;
- no **node has a URL**.

Independent Claim 32

[0022] Applicant submits that the combination of Dowling and Goldman does not render obvious at least the following features as recited in this claim (with emphasis added):

"**determine** its location **by**

receiving location information from a location provider, the location information pertaining to a current location of the portable computing device,

accessing one or more **hierarchical tree structures** each of which comprising multiple nodes that represent physical or logical locations, **each node having a unique identifier**, and

traversing at least one node on the one or more hierarchical tree structures **responsive to the receiving of the location information** to ascertain a device location;

generate a service query that is configured to identify services that are associated with the location;

wirelessly send the query to one or more servers;

receive a response from the one or more servers that contains digital data associated with **applets** that can be executed by the device and that provide a location-specific service; and

locally execute the one or more applets to interact with a location environment."

[0023] In contrast, in Dowling:

- the mobile device has only receivers, not transmitters, and therefore is not able to "**wirelessly send** the query to one or more servers."

- the mobile device does not acquire any applet (The Examiner alleges that the "application data" in Dowling is an applet. The Applicant respectfully disagrees because an applet is a program that runs in the context of another program. The "application data" in Dowling is a data, such as a web page, not a program (col. 15, ll. 31-40));

- the mobile device does not locally execute any applet (In Dowling, the "application data" is directly downloaded without be executed);

- location is determined without accessing a hierarchical tree structure;

- location is determined without traversing a hierarchical tree structure responsive to receiving the location information (in Dowling, location is determined directly from GPS information without further accessing or traversing a hierarchical tree structure) .

[0024] The Examiner admits that Dowling fails to disclose a hierarchical tree structure and asserts that Goldman cures this deficiency. The Applicant respectfully disagrees. Claim 32 recites "accessing one or more hierarchical tree structures" and "traversing at least one node on the one or more hierarchical tree structures" to **determine a location** of the portable computing device. However, in Goldman, the tree structure is used for **organizing and viewing** information stored in the information repository. Also, claim 32 recites "multiple

nodes that represent physical or logical locations." However, in Goldman, not all nodes are related to locations. For example, in Fig. 37 of Goldman, "ROUTERS" and "SWITCHES" are not location nodes. Furthermore, with amendments in claim 32, Goldman fails to disclose or teach "each node having a unique identifier." Instead, in Goldman, no unique identifier is associated with each node and two different nodes may have the same entry, as shown in Fig. 37 of Goldman, where "DEVICES," "ROUTERS," and "SWITCHES" are in many nodes.

Independent Claim 41

[0025] Applicant submits that the combination of Dowling and Goldman does not render obvious at least the following features as recited in this claim (with emphasis added):

"a location service module configured to wirelessly receive location information and **ascertain a location** associated with the location information **by**

receiving the location information from a location provider, the location information pertaining to a current location of the portable computing device,

accessing one or more **hierarchical tree structures** each of which comprising multiple nodes that represent physical or logical locations, **each node having a unique identifier**, and

traversing at least one node on the one or more hierarchical tree structures responsive to the receiving of the location information **to ascertain a device location**; and

an **applet manager** operably associated with the location service module and configured to receive and manage applets that can be wirelessly received and that pertain to a location that is ascertained by the location service module, the applets being configured to enable a user of a computer device to interact with an application associated with a location environment, wherein **the application queries the portable computing device about the current location**, by supplying the application with information that pertains to the ascertained location."

[0026] In contrast, in Dowling:

- location is determined without accessing a hierarchical tree structure;
- location is determined without traversing a hierarchical tree structure **responsive to receiving the location information** (in Dowling, location is determined directly from GPS information without **further** accessing or traversing a hierarchical tree structure) ;
- no application **queries** the mobile device (In Dowling, web pages are downloaded directly. Also, in Dowling (col. 15, ll. 31-40), the mobile device **sends** request, **not receives** queries, to ask for web pages to be downloaded.) ;

- the mobile device does not supply the application **with information that pertains to the determined location**.

[0027] The Examiner admits that Dowling fails to disclose a hierarchical tree structure and asserts that Goldman cures this deficiency. The Applicant respectfully disagrees. Claim 41 recites "accessing one or more hierarchical tree structures" and "traversing at least one node on the one or more hierarchical tree structures" to **determine a location** of the portable computing device. However, in Goldman, the tree structure is used for **organizing and viewing** information stored in the information repository. Also, claim 41 recites "multiple nodes that represent physical or logical locations." However, in Goldman, not all nodes are related to locations. For example, in Fig. 37 of Goldman, "ROUTERS" and "SWITCHES" are not location nodes. Furthermore, with amendments in claim 41, Goldman fails to disclose or teach "each node having a unique identifier." Instead, in Goldman, no unique identifier is associated with each node and two different nodes may have the same entry, as shown in Fig. 37 of Goldman, where "DEVICES," "ROUTERS," and "SWITCHES" are in many nodes.

Independent Claim 48

[0028] Applicant submits that the combination of Dowling and Goldman does not render obvious at least the following features as recited in this claim (with emphasis added):

"a location service module configured to receive location information and **ascertain a location** associated with the location information **by**

receiving location information from a location provider, the location information pertaining to a current location of the portable computing device,

accessing one or more **hierarchical tree structures** each of which comprising multiple nodes that represent physical or logical locations, **each node having a unique identifier**, and

traversing at least one node on the one or more hierarchical tree structures responsive to the receiving of the location information to ascertain a device location;

an **applet** manager operably associated with the location service module and configured to receive and manage applets that can be wirelessly received and that pertain to a location that is ascertained by the location service module;

an applet runtime environment in which applets that are received can **execute** to enable a user of the device to interact with a location environment;

an **applet cache** in which applets can be cached for use in connection with an ascertained location"

[0029] In contrast, in Dowling:

- the mobile device does not acquire any applet (The Examiner alleges that the "application data" in Dowling is an applet. The Applicant respectfully disagrees because an applet is a program that runs in the context of another program. The "application data" in Dowling is a data, such as a web page, not a program (col. 15, ll. 31-40));

- the mobile device does not locally execute any applet (In Dowling, the "application data" is directly downloaded without be executed);

- location is determined without accessing a hierarchical tree structure;

- location is determined without traversing a hierarchical tree structure responsive to receiving the location information (in Dowling, location is determined directly from GPS information without further accessing or traversing a hierarchical tree structure) .

[0030] The Examiner admits that Dowling fails to disclose a hierarchical tree structure and asserts that Goldman cures this deficiency. The Applicant respectfully disagrees. Claim 48 recites "accessing one or more hierarchical tree structures" and "traversing at least one node on the one or more hierarchical tree structures" to **determine a location** of the portable computing device. However, in Goldman, the tree structure is used for **organizing and viewing** information stored in the information repository. Also, claim 48 recites "multiple nodes that represent physical or logical locations." However, in Goldman, not all nodes are related to locations. For example, in Fig. 37 of Goldman, "ROUTERS" and "SWITCHES" are not location nodes. Furthermore, with amendments in claim 48, Goldman fails to disclose or teach "each node having a unique identifier." Instead, in Goldman, no unique identifier is associated with each node and two different nodes may have the same entry, as shown in Fig. 37 of Goldman, where "DEVICES," "ROUTERS," and "SWITCHES" are in many nodes.

[0031] As shown above, the combination of Dowling and Goldman does not teach or render obvious all of the elements and features of this claim. Accordingly, Applicant asks the Examiner to withdraw the rejection of this claim.

Dependent Claims

[0032] These claims ultimately depend upon independent claims 2, 20, 32, 41 and 48. As discussed above, claims 2, 20, 32, 41 and 48 are allowable. It is axiomatic that any dependent claim which depends from an allowable base claim is also allowable. Additionally, some or all of these claims may also be allowable for additional independent reasons.

Dependent Claim 4

[0033] Dowling and Goldman fail to disclose those features as recited in this claim (with emphasis added): "said accessing comprises accessing said one or more hierarchical tree structures from a source that is **remote** from the device." Here, the hierarchical tree structures are used for **determining a location** of the portable computing device.

[0034] In the Examiner's Reply Brief dated 4/28/05, the Examiner refers to Dowling, col. 4, ll. 33-35, "the mobile unit also maintains the network connection, but **derives geographical information from a GPS receiver**. The network connection preferably is an Internet connection or a connection to a central server such as a database server." However, the database server in

Dowling is not used for determining a location of the device. Instead, a GPS receiver is used for determining a location of the device.

Dependent Claim 5

[0035] Dowling and Goldman fail to disclose those features as recited in this claim (with emphasis added): "said accessing comprises **wirelessly** accessing said one or more hierarchical tree structures."

[0036] In Dowling, the mobile device has only receivers, not transmitters, and therefore is not able to wirelessly accessing a database server.

Dependent Claim 11

[0037] Dowling and Goldman fail to disclose those features as recited in this claim (with emphasis added): "the digital data comprises code download **pointers** that reference software code that can be wirelessly downloaded on the device." Instead, Dowling does not disclose any pointer as alleged by the Examiner.

Conclusion

[0038] All pending claims are in condition for allowance. Applicant respectfully requests reconsideration and prompt issuance of the application. If any issues remain that prevent issuance of this application, the **Examiner is urged to contact me before issuing a subsequent Action**. Please call or email me or my assistant at your convenience.

Respectfully Submitted,

Lee & Hayes, PLLC
Representatives for Applicant

Dated: 2-7-08

Kasey C. Christie (kasey@leehayes.com; x232)
Registration No. 40559
Customer No. **22801**

Telephone: (509) 324-9256
Facsimile: (509) 323-8979
www.leehayes.com